



**US Army Corps  
of Engineers**  
Huntington District

# Public Notice

|                          |  |                  |                 |
|--------------------------|--|------------------|-----------------|
| In reply refer to:       | 200301006  | Issuance Date:   | July 22, 2004   |
| <b>Public Notice No.</b> |  |                  |                 |
| <b>Stream:</b>           | UT Belcher Branch  | Expiration Date: | August 23, 2004 |
| Address comments to:     | US Army Corps of Engineers, Huntington District<br>602 Eighth Street<br>ATTN: CELRHE<br>Huntington, West Virginia 25701-2070 |                  |                 |

## PUBLIC NOTICE

**TO WHOM IT MAY CONCERN:** The following application has been submitted for a Department of the Army Permit under the provisions of Section 404 of the Clean Water Act. This notice serves as the Corps of Engineers' request to the West Virginia Department of Environmental Protection to act on Section 401 Water Quality Certification for the following application.

**APPLICANT:** Black Wolf Mining Company  
Post Office Box 1335  
Bluefield, West Virginia 24701

**LOCATION:** The proposed project is located on unnamed tributaries of Belcher Branch and Sandlick Creek, which are tributaries of the Tug Fork River. The site is located approximately 0.5 miles south of Thorpe and 0.75 miles northeast of Elbert in Adkin District of McDowell County, West Virginia as depicted on **Figure 1** (Attached) titled "Permit Location Map." The location of the proposed valley fills and their associated sediment ponds is identified on **Figure 2** titled "Proposed Valley Fills."

**DESCRIPTION OF THE PROPOSED WORK:** The applicant proposes to place fill material into waters of the U.S. in conjunction with the construction of two valley fills (No. 1 and 2) and two sediment ponds (No. 1 and 2). Additionally, the applicant proposes to construct another valley fill (No. 3) outside the Corps' regulatory jurisdiction, as verified by the Huntington District on December 17, 2003. Construction of the proposed Valley Fills 1 and 2 would result in the discharge of fill material into approximately 1,023 linear feet or 0.074 acre of waters of the U.S. Of this total, 150 linear feet or 0.015 acre is intermittent stream impacts and 873 linear feet or 0.059 acre is ephemeral stream impacts. Further, approximately 723 linear feet or 0.060 acre of stream channel would be temporarily impacted by the construction of the proposed sediment ponds. Of this, 568 linear feet or 0.048 acre is intermittent stream impacts and 155 linear feet or 0.012 acre is ephemeral stream impacts. Lastly, approximately 109 linear feet or 0.006 acre of ephemeral stream channel, located between the back of the ponds and the toe of the valley fills, would be indirectly impacted by sediment transport. These values include approximately 45 linear feet or 0.001 acre of ephemeral stream channel above the back of Pond 2 and below the ordinary high water mark of the stream below the toe of Valley Fill 3. In total, approximately 1,855 linear feet or 0.140 acre of waters of the U. S. would be impacted by the proposed project. **Table A** of this public notice details the proposed mining activities and corresponding information with respect to the proposed impact locations and stream loss (linear feet and acres). Each of the proposed valley fills would drain watersheds of less than 250 acres, ranging from 20.38 acres to 47.20 acres, as detailed on **Table B** of this public notice.

Pursuant to the Surface Mining Control and Reclamation Act of 1977, the West Virginia Department of Environmental Protection (WVDEP) approved the Surface Mining Permit application (Permit S-4002-00) on February 21, 2003.

The proposed operation would affect 224.50 acres of surface, including 144.47 acres of mineral removal, to facilitate the recovery of 1,500,000 tons of coal in two splits of the Pocahontas No. 11 seam and two splits of the Firecreek seam. Mineral extraction would be accomplished using mountaintop removal mining techniques. The operation would generate nearly 16.2 million cubic yards of overburden (including the 25% swell factor) of which roughly 9.2 million cubic yards would be backstacked within the mineral removal areas. Nearly 6.4 million cubic yards of excess spoil would be placed in the proposed valley fills as detailed in **Table C** of this public notice, and the remaining 600,000 cubic yards would be backstacked on an adjacent mine permit and used to complete reclamation at the site.

The proposed project would be accomplished in four general phases over a period of 5 years. Each of the phases has been illustrated on the attached phase maps (**Figures 3.1, 3.2, 3.3 and 3.4**) and is briefly discussed below.

**Phase One (Figure 3.1):** Phase 1 begins at the southern end of Mining Area 2. Overburden from the initial mining would be backstacked on the adjacent surface mine permit (S-4005-97) and used to complete reclamation of that site. Infrequently Used Access Road (IUAR) No. 1, Pond 1, IUAR No. 2 and Pond 2 would be constructed and certified and the upper portions of Valley Fills 1 and 3 would be cleared and grubbed. Alternate pits would be taken in Mining Area 2 and Mining Area 3 with excess spoil from Area 2 being placed in Valley Fill 2 and excess spoil from Area 3 being placed in Valley Fill 1.

**Phase Two (Figure 3.2):** The remaining portions of Valley Fills 3 and 1 would be cleared and grubbed during the initial portions of Phase 2. Alternate lifts would continue to be taken between Mining Area 2 and Mining Area 3 with excess spoil being stored in Valley Fills 3 and 1 respectively. As Valley Fill 3 approaches the designed capacity, the upper portion of Valley Fill 2 would be cleared and grubbed allowing mining to continue in Area 2. Once filled to capacity, Valley Fill 3 would be regarded to its final configuration and revegetated. Regrading of the backfilled benches in Area 2 would be ongoing with mining.

**Phase Three (Figure 3.3):** The lower level of Valley Fill 1 (below the 2100 Elevation) is expected to be filled to capacity by the end of Phase Two. Regrading of the face of the fill shall be initiated. Mining in Area 3 would resume at the southern end of Valley Fill 1 and progress in a southern direction, backstacking the overburden in the mineral removal area and on top of Valley Fill 1. The remaining portions of Valley Fill 2 would be cleared and grubbed allowing mining in Area 2 to be completed. Regrading of the backfilled mine benches would be ongoing in both mining areas through the life of Phase 3.

**Phase Four (Figure 3.4):** By the end of Phase Three, all mining in Areas 2 and 3 would be complete and final reclamation in these areas would be ongoing. If market conditions allow it, the coal reserves in Mining Area 1 would be mined. Excess spoil from these operations would be hauled to and placed in the final mineral removal area in Mining Area 3 and used to complete reclamation.

Upon completion of Phase Four, all disturbances in Mining Areas 2 and 3 would be regraded and revegetated. Sufficient overburden to complete reclamation of Area 1 would be kept on site. Final Reclamation would consist of regrading and revegetating 10.94 acres in Mining Area 1. Once the Phase Two vegetation release of the Article 3 permit is approved, Sediment Ponds 1 and 2 and IURA 1 and 2 would be reclaimed and abandoned.

**Table D** of this public notice has been included to provide the disturbed and reclaimed acreage of each of the Phases discussed above, along with the length in months that each phase is anticipated to last.

According to the applicant, the purpose of the project is to construct valley fills to dispose of excess overburden (spoil) generated by surface mining operations into waters of the United States, in order to achieve optimal recovery of the available coal reserves within the project area. Sediment ponds will be constructed below the fills to provide the mandatory sediment control for the excess spoil disposal areas.

Plans for the proposed valley fills and the associated sediment ponds can be found on **Figures 4 through 7** of this public notice.

**MITIGATION PLAN:** The applicant has submitted a compensatory mitigation plan (CMP) to compensate for permanent and temporary impacts to waters of the U.S. regulated by the Department of the Army, Corps of Engineers. **Figure 14** (attached) depicts the geographic relationship between the proposed impact site(s) and the proposed mitigation site(s). To compensate for permanent and temporary impacts to waters of the U.S., the applicant proposes to mitigate off-site through in-kind restoration and enhancement of aquatic resources. The proposed off-site mitigation area is located within a 2,775 linear foot segment of Belcher Branch (downstream of proposed Valley Fills 2 and 3) and within a 1,150 linear foot segment of an unnamed tributary of Belcher Branch. The habitat enhancement of Belcher Branch plan consists of the removal of debris in and around the stream, the installation of rock and wood structures for stabilization of the stream banks and habitat enhancement, and re-vegetation for areas that may be disturbed by pre-law mining and construction activities. The restoration of ephemeral stream channel on an unnamed tributary of Belcher Branch consists of the construction of a primary and secondary channel, the installation of rock and wood structures for stabilization of the stream banks and habitat enhancement, and re-establishment of vegetation along the stream channels.

One factor in mitigation site selection included existing stream conditions on Belcher Branch and its unnamed tributary. The unnamed tributary of Belcher Branch and the main channel of Belcher Branch have been impacted by human activities such as mining and road construction. A second factor considered during the site selection process and plan formulation for this project included proximity. In-kind stream channel enhancement and restoration is expected to preserve aquatic resources in the impacted watershed of Belcher Branch. A third factor of site selection was site protection. The applicant has indicated they would be able to provide a restrictive covenant to permanently protect the proposed mitigation sites.

The applicant's mitigation project would proceed in phases in an effort to minimize temporal losses of aquatic resources. This mitigation plan consists of two aspects of mitigation: stream enhancement and stream restoration. Phase I and Phase II of mitigation would include enhancing existing stream habitat on Belcher Branch. Phase I and Phase II would proceed in three individual phases (Phases 1,

2, and 3). Proposed Valley Fills 1, 2 and 3 would be constructed during Phase I of mitigation only; however, the valley fills would be constructed after mitigation is initiated. Phase III of mitigation would include restoration of ephemeral stream channel on an unnamed tributary of Belcher Branch. Phase III of mitigation would proceed in four individual phases (Phases 1, 2, 3, and 4). The table below summarizes work to take place in Phases I, II, and III.

| <b>Phase</b>   | <b>Credit</b> | <b>Debit</b> | <b>Balance</b> |
|--|---------------|--------------|----------------|
| <b>Phase I</b>   |               |              |                |
| Initiation of enhancement on Belcher Branch from station 0+00 to 18+55 <sup>1</sup>  | 1,855         | 0            | 1,855          |
| Construction of Valley Fills 1, 2, and 3 <sup>2</sup>                                | 0             | 1,855        | 0              |
| Balance at end of Phase I  |               |              | 0              |
| <b>Phase II</b>  |               |              |                |
| Initiation of enhancement on Belcher Branch from station 18+55 to 27+75 <sup>3</sup> | 920           | 0            | 920            |
| Balance at end of Phase II   |               |              |                |
| <b>Phase III</b>   |               |              |                |
| Initiation of restoration of an unnamed tributary of Belcher Branch <sup>4</sup>     | 1,150         | 0            | 2,070          |
| Balance at end of Phase III to be used for future mitigation                         |               |              | 2,070          |

### **Phase I of Overall Mitigation Project**

Phase I of the project would include stream habitat enhancement of approximately 1,855 feet of perennial stream on the main channel of Belcher Branch from stations 0+00 to 18+55. Mitigation in this phase would be initiated prior to filling of jurisdictional waters. After enhancement is initiated on Belcher Branch, jurisdictional waters to be filled in this phase would include 1,855 feet of stream channel on unnamed tributaries of Sandlick Creek and Belcher Branch. The balance at the end of Phase I would be 0.

### **Phase II of Overall Mitigation Project**

Phase II of the project would include stream habitat enhancement of approximately 920 feet of perennial stream on the main channel of Belcher Branch from stations 18+55 to 27+75. Mitigation in this phase would be initiated after Phase I is completed and would be used as credit toward future mining activities. No filling of jurisdictional waters would take place during Phase II. A credit of approximately 920 feet to be used for future mining activities would remain at the end of Phase II.

<sup>1</sup> Mitigation in this phase would be initiated prior to filling of jurisdictional waters.

<sup>2</sup> Length includes impacts for temporary, secondary, and permanent impacts.

<sup>3</sup> Mitigation in this phase would be initiated after Phase I of mitigation is complete and would be used as credit toward future mining activities.

<sup>4</sup> Mitigation in this phase would be initiated after Phase II of mitigation is complete and would be used as credit toward future mining activities.

### **Phase III of Overall Mitigation Project**

Phase III would include restoration of approximately 1,150 feet of ephemeral stream channel on the unnamed tributary of Belcher Branch. Mitigation in this phase would be initiated after Phase II is completed. No filling of jurisdictional waters would take place during Phase III. A credit of approximately 2,070 feet would remain at the end of this phase.

### **PHASES I AND II** **BELCHER BRANCH** **NATURAL STREAM ENHANCEMENT PROJECT**

**Phase I** would be initiated prior to filling of jurisdictional waters in unnamed tributaries of Sandlick Creek and Belcher Branch. Phase I would include stations 0+00 to 18+55 and would be the only phase executed prior to initiation of mining activities. Phase II would be initiated after completion of Phase I of mitigation and would be used as mitigation credits toward future mining activities. Phase II would include stations 18+55 to 27+75.

**Phase I and Phase II** combined would include approximately 2,775 feet of perennial stream enhancement on the main channel of Belcher Branch. Channel modification of Belcher Branch would generally follow criteria and guidelines set forth by the Natural Resources Conservation Service.

**Phase 1:** Most of the debris in Belcher Branch consists of discarded household appliances and typical residential trash. These items would be removed during Phase 1 from the streambed in order to improve fish habitat, benthic macroinvertebrate habitat, and maintain the continuity of the stream.

**Phase 2:** During Phase 2, rock and wood structures would be installed in Belcher Branch. Installation of structures is based on stream conditions observed in August 2003. Also to occur during Phase 2 would be the removal of a culvert pipe. This pipe impacts approximately 50 feet of stream channel and is located approximately 2,725 feet upstream from the start point of mitigation. As part of this mitigation plan, the culvert would be removed and the stream channel restored.

**Phase 3:** Phase 3 of this portion of the mitigation plan would include the re-establishment of vegetation along the portions of Belcher Branch disturbed by the removal of debris or the installation of rock and wood structures. Vegetation re-establishment of Belcher Branch would generally follow criteria and guidelines set forth by the Natural Resources Conservation Service. It is the applicant's intention to create a riparian buffer zone 25 feet on either side of the enhanced stream channel; however, this may not be possible along the entire length of the mitigated area due to the close proximity of an access road built by others on the east side of Belcher Branch.

### **PHASE III** **UNNAMED TRIBUTARY OF BELCHER BRANCH** **NATURAL STREAM RESTORATION PROJECT**

**Phase III** would be initiated after Phase II of mitigation is completed and would be used as credit toward future mining activities. All channel construction and modification would generally follow recommendations and guidelines set forth by the Natural Resources Conservation Service criteria.

Pre-law mining by others has altered the natural topography of this valley and, as a result, a major percentage of water flow in the unnamed tributary of Belcher Branch is subterranean until reaching the lower portion. A haul road sump was constructed at the base of the unnamed tributary of Belcher Branch. The water source feeding the sump is the haul road constructed by others along the east side of the previously mentioned access road along Belcher Branch. In order for water to flow from the unnamed tributary into Belcher Branch, the water level in the haul road sump must raise to the height of the culvert. The location of the sump is important for sediment control from the haul road; however, it causes a disruption of water flow from the unnamed tributary into Belcher Branch. A second access road (AR2) constructed by others intersects the previously mentioned access road approximately 500 feet south from the haul road sump. AR2 runs parallel to the unnamed tributary of Belcher Branch for approximately 850 feet before crossing the stream channel. As part of this mitigation plan, the haul road sump would be removed and be reconstructed further south along the access road. The culvert would also be removed and replaced by one deeper than the original; however, this would not take place until the bond is released on the haul road. Moving the location of the sump and adjusting the height of the culvert is expected to avoid the disruption of water drainage from the unnamed tributary to Belcher Branch.

The total length of stream channel included in this portion of the mitigation plan includes 1,150 feet of restored channel. The initial 350 feet upstream from the sump has been covered by refuse soil from previous mining activities. One hundred feet upstream from the sump water discharges from the edge of a flat portion of the refuse and has created an unstable channel through the refuse area.

A pond has formed on the upstream portion of the refuse area. Water still flows on ground level within a small segment of stream channel upstream from the pond; however, a significant portion of the channel is badly eroded. Water flows at ground level within this small segment of stream channel until it is crossed by AR2. At this intersection, a stream crossing was constructed by others and the unnamed tributary is piped under the intersection. The portion of the unnamed tributary upstream from the piped portion has also been affected by mining activities and the drainage is subterranean.

**Phase 1:** A pump would be temporarily located at the pond discharge point to facilitate the draw down of the water contained in the structure. After a sufficient amount of the water has been drawn down, a sump would be dug within the confines of the tail of the structure. A second pump would be inserted within this sump to bypass the incoming water to be diverted below the temporarily impacted stream channel. This would allow the structure to be properly drained and prevent any downstream sediment deposition.

**Phase 2:** A primary and secondary stream channel would be constructed beginning at the haul road sump found at the confluence of Belcher Branch and this unnamed tributary. The constructed channel would continue upstream approximately 1,150 feet to the point at which the unnamed tributary of Belcher Branch is not disturbed by mining activities. The primary stream channel would be lined with cobble-sized stone (2.5 to 10 inches in diameter) and would be designed on a 1-year storm event. Boulder-sized stone (10 inches or greater in diameter) would be randomly placed in the secondary channel, which would be designed on a 25-year storm event. The primary stream channel would be constructed in a meandering pattern within the secondary channel.

**Phase 3:** Phase 3 of this portion of the mitigation plan would include the re-establishment of vegetation along the restored portion of the unnamed tributary of Belcher Branch.

Re-establishment of vegetation along the unnamed tributary of Belcher Branch would generally follow criteria and guidelines set forth by the Natural Resources Conservation Service. This would include the establishment of a 25-foot riparian buffer zone on both sides of the restored stream channel.

**Phase 4:** During Phase 4, rock and wood structures would be installed in the restored portion of the unnamed tributary of Belcher Branch. Installation of structures would be on an “as-built” basis based on stream channel performance following completion of the primary and secondary stream channels.

The goal of applicant’s mitigation plan is to practicably offset losses of aquatic resources. Through enhancement of selected portions of perennial stream channel on Belcher Branch and restoration of ephemeral stream channel on an unnamed tributary of Belcher Branch, the applicant intends to improve and restore stream channel habitat to support an improved functional capacity of the mitigated area.

The applicant proposes to restore the stream segments temporarily impacted by sediment construction. Natural stream design techniques would be incorporated into the design of the mitigation work. A vegetated riparian buffer zone would be established along the mitigation sites and would generally follow criteria and guidelines set forth by the Natural Resources Conservation Service.

**WATER QUALITY CERTIFICATION:** A Section 401 Water Quality Certification is required for this project. It is the applicant’s responsibility to obtain certification from the West Virginia Department of Environmental Protection.

**HISTORIC AND CULTURAL RESOURCES:** The National Register of Historic Places (NRHP) has been consulted and it has been determined there are no properties currently listed on the register that are in the area affected by the project. This determination was based upon evaluation of the project area according to the Criteria of Significance and current state inventory information. A copy of this public notice will be sent to the State Historic Preservation Office for their review.

**ENDANGERED/THREATENED SPECIES REVIEW:** The applicant retained the services of Compliance Monitoring Laboratories, Inc. to conduct a bat mist net survey to determine presence or probable absence of the Indiana bat. Two mist net sites were selected and surveyed during June 17 to July 1, 2004. No Indiana bats were captured during this survey. Additionally, no old, open abandoned mine portals were observed within the proposed project area.

Based on the fact no Indiana bats were captured during the mist net survey and no old, abandoned mine portals are located within proposed project area, the Corps has determined the proposed project will have no effect on endangered or threatened species or their critical habitat. Therefore, neither a biological assessment nor further consultation under Section 7 of the Endangered Species Act is warranted.


This public notice serves as a request to the U.S. Fish and Wildlife Service for any additional information they may have on whether any listed or proposed to be listed endangered or threatened species may be present in the area which would be affected by the activity, pursuant to Section 7(c) of the Endangered Species Act of 1972 (as amended).

**PUBLIC INTEREST REVIEW AND COMMENT:** Any person who has an interest that may be adversely affected by the issuance of a permit may request a public hearing. The request must be submitted in writing to the District Engineer on or before the expiration date of this notice and must clearly set forth the interest which may be adversely affected and the manner in which the interest may be adversely affected by the activity.

Interested parties are invited to state any objections they may have to the proposed work. The decision whether to issue a permit will be based on an evaluation of the probable impact including cumulative impacts of the proposed activity on the public interest. That decision will reflect the national concern for both protection and utilization of important resources. The benefit that reasonably may be expected to accrue from the proposal must be balanced against its reasonably foreseeable detriments. All factors that may be relevant to the proposal will be considered including the cumulative effects thereof; of those are conservation, economics, aesthetics, general environmental concerns, wetlands, historic properties, fish and wildlife values, flood hazards, floodplain values, land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs, considerations of property ownership and, in general, the needs and welfare of the people. In addition, the evaluation of the impact of the activity on the public interest will include application of the guidelines promulgated by the Administrator, Environmental Protection Agency, under the authority of Section 404(b) of the Clean Water Act. Written statements on these factors received in this office on or before the expiration date of this public notice will become a part of the record and will be considered in the final determination. A permit will be granted unless its issuance is found to be contrary to the public interest.

The Corps of Engineers is soliciting comments from the public; Federal, state, and local agencies and officials; Indian Tribes; and other interested parties in order to consider and evaluate the impacts of this proposed activity. Any comments received will be considered by the Corps of Engineers to determine whether to issue, modify, condition or deny a permit for this proposal. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects, and the other public interest factors listed above. Comments are used in the preparation of an Environmental Assessment and/or an Environmental Impact Statement pursuant to the National Environmental Policy Act. Comments are also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity.

If you have any questions concerning this public notice, please call Mrs. Teresa Spagna of the South Regulatory Section at 304-399-5710.

  
Ginger Mullins, Chief  
Regulatory Branch

(W)



**Table A**  
**Black Wolf Mining Company**  
**Navaro Surface Mine No. 2**

**Jurisdictional Waters Impact Summary**

| Structure         | Permanent Intermittent |             | Permanent Ephemeral |              | Temporary Intermittent |              | Temporary Ephemeral |              | Secondary Intermittent |              | Secondary Ephemeral |              |
|-------------------|------------------------|-------------|---------------------|--------------|------------------------|--------------|---------------------|--------------|------------------------|--------------|---------------------|--------------|
|                   | feet                   | acres       | Feet                | Acres        | feet                   | acres        | feet                | acres        | feet                   | acres        | feet                | acres        |
| Valley Fill No. 1 | 150                    | 0.015       | 398                 | 0.033        |                        |              |                     |              | 49                     | 0.004        |                     |              |
| Pond No. 1        |                        |             |                     |              | 338                    | 0.032        |                     |              |                        |              |                     |              |
|                   |                        |             |                     |              |                        |              |                     |              |                        |              |                     |              |
| Valley Fill No. 2 |                        |             | 475                 | 0.026        |                        |              |                     |              |                        |              | 15                  | 0.001        |
| Pond No. 2        |                        |             |                     |              | 230                    | 0.016        | 155                 | 0.012        |                        |              |                     |              |
|                   |                        |             |                     |              |                        |              |                     |              |                        |              |                     |              |
| Valley Fill No. 3 |                        |             |                     |              |                        |              |                     |              |                        |              | 45                  | .001         |
|                   |                        |             |                     |              |                        |              |                     |              |                        |              |                     |              |
| <b>Total</b>      | <b>150</b>             | <b>.015</b> | <b>873</b>          | <b>0.059</b> | <b>568</b>             | <b>0.048</b> | <b>155</b>          | <b>0.012</b> | <b>49</b>              | <b>0.004</b> | <b>60</b>           | <b>0.002</b> |

**Table B**  
**Black Wolf Mining Company**  
**Navaro Surface Mine No. 2**  
**Affected Drainage Areas**

| <b>Disposal Site</b> | <b>Drainage Area<br/>Fill Toe (acres)</b> |
|----------------------|---|
| Valley Fill 1        | 47.20                                     |
| Valley Fill 2        | 20.38                                     |
| Valley Fill 3        | 36.46                                     |
| <b>Total</b>         | <b>104.04</b>                             |

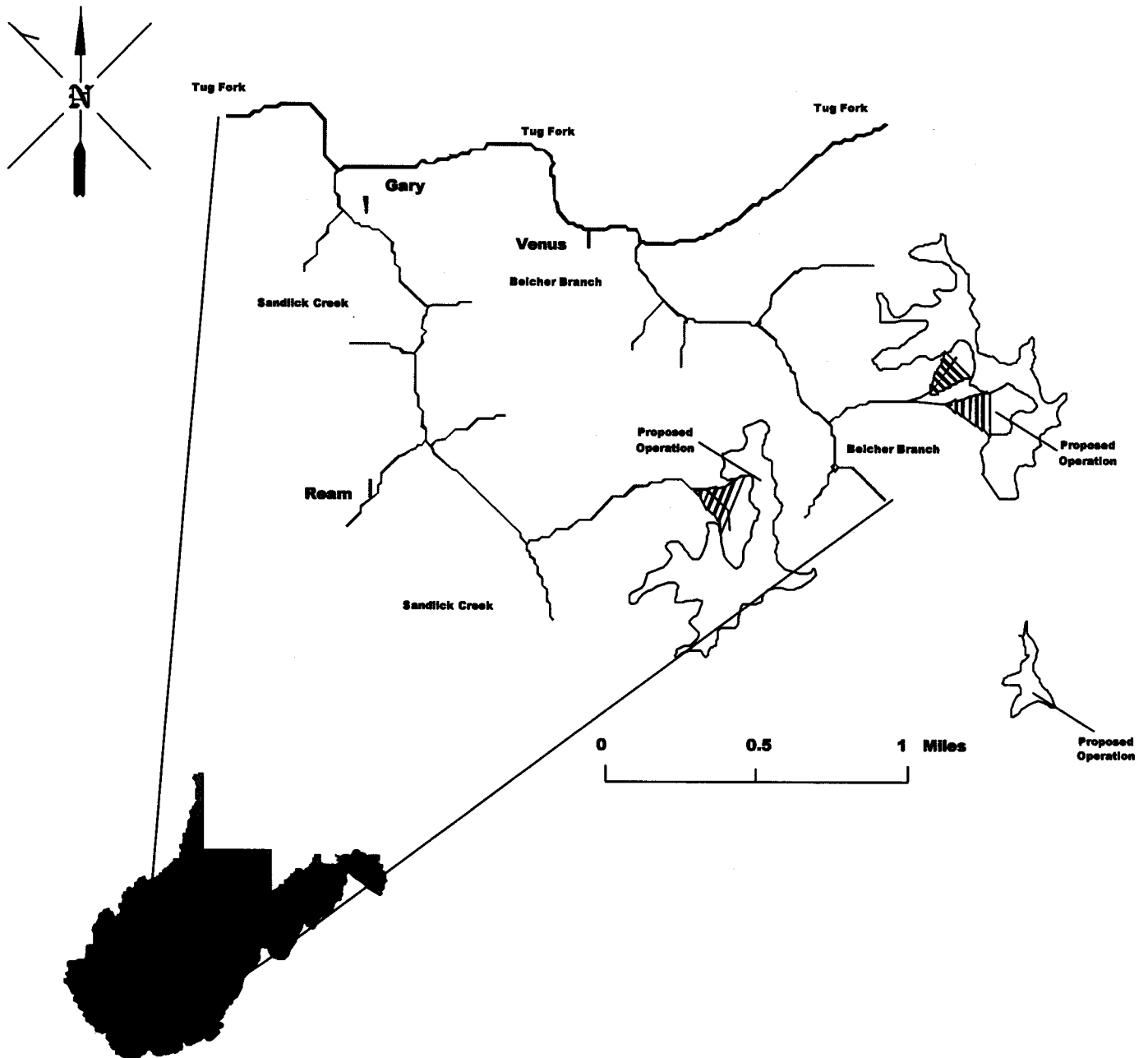
**Table C**  
**Black Wolf Mining Company**  
**Navaro Surface Mine No. 2**  
**Total Fill Volume/Valley Fill Disposal Site**

| <b>Disposal Site</b> | <b>Fill Volume<br/>Cubic Yards</b> |
|----------------------|------------------------------------|
| Valley Fill 1        | 3,229,848                          |
| Valley Fill 2        | 888,056                            |
| Valley Fill 3        | 2,247,278                          |
| <b>Total</b>         | <b>6,365,182</b>                   |

**Table D**  
**Black Wolf Mining Company**  
**Navaro Surface Mine No. 2**  
**Mining and Reclamation Schedule**

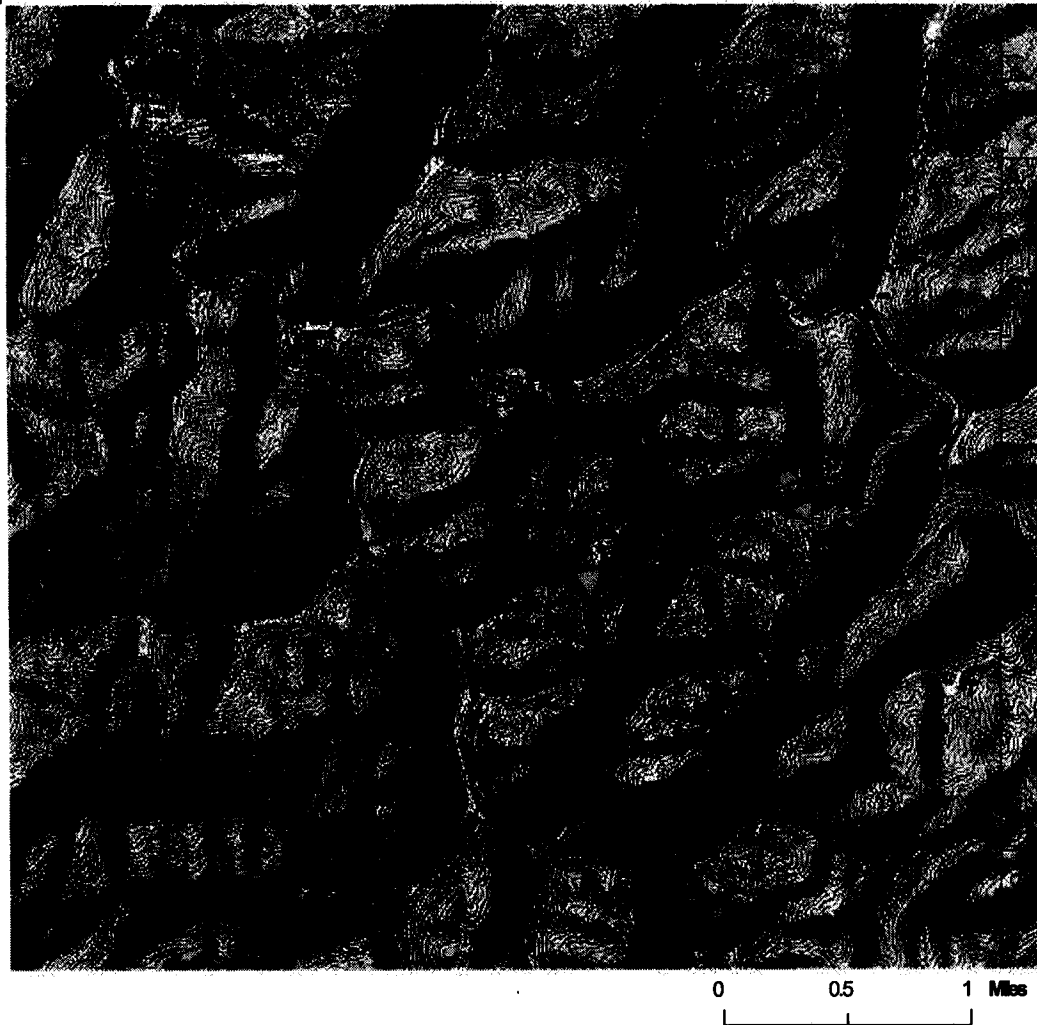
| <b>PHASE</b>      | <b>MINING*</b> |            |              | <b>RECLAMATION</b> |            |              | <b>UNRECLAIMED</b> |
|-------------------|----------------|------------|--------------|--------------------|------------|--------------|--------------------|
|                   | <b>START</b>   | <b>END</b> | <b>ACRES</b> | <b>START</b>       | <b>END</b> | <b>ACRES</b> | <b>ACRES</b>       |
| 1                 | 0              | 22         | 90.25        | 0                  | 22         | 19.43        | 70.82              |
| 2                 | 22             | 37         | 61.15        | 22                 | 37         | 53.88        | 78.09              |
| 3                 | 37             | 52         | 62.16        | 37                 | 52         | 61.68        | 78.57              |
| 4                 | 52             | 58         | 10.94        | 52                 | 58         | 78.57        | 10.94              |
| Final Reclamation |                |            |              | 58                 | 64         | 10.94        | 0                  |

\* Considers regraded and unseeded area as disturbed. Start and End times are in months.

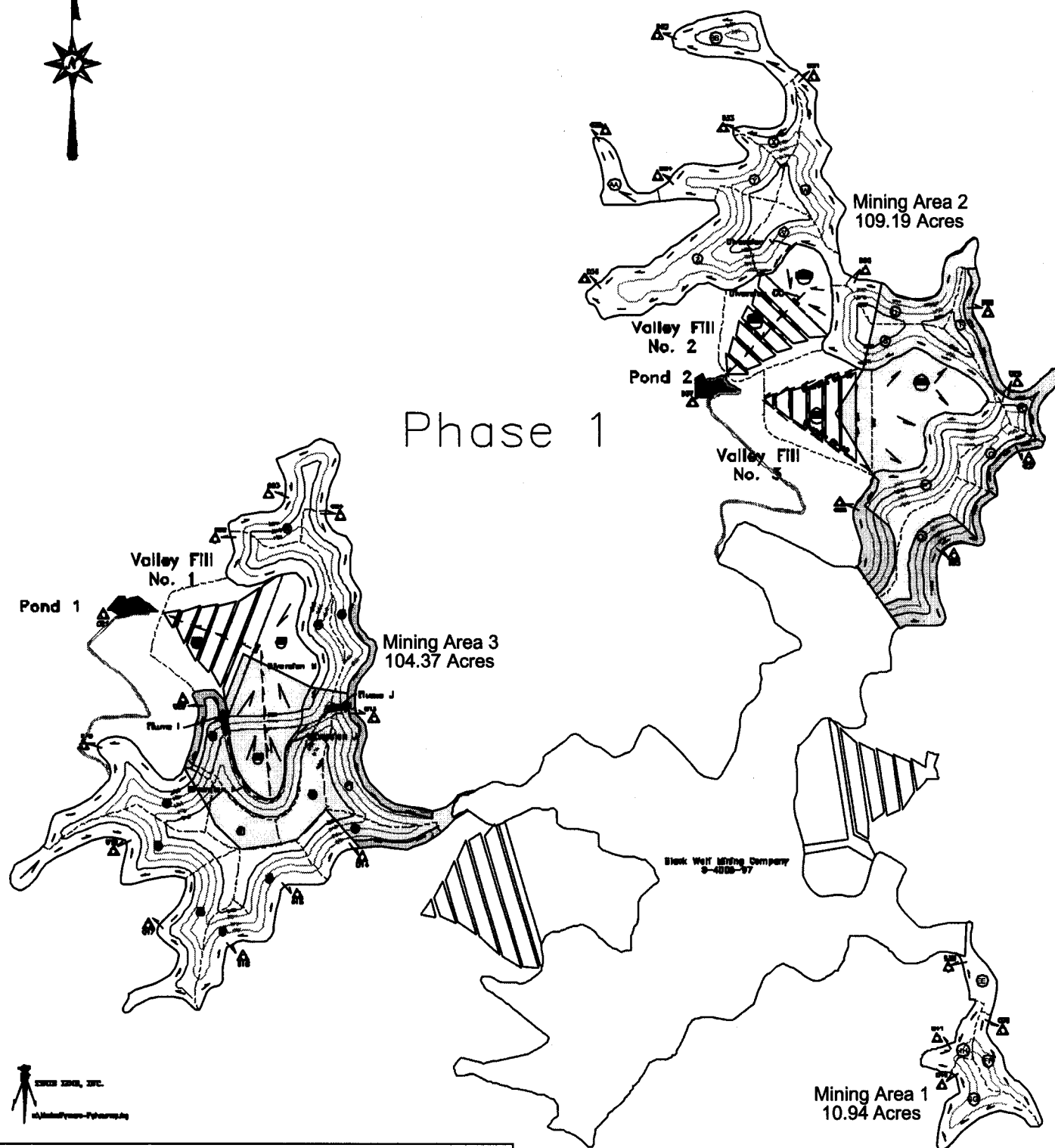


**Figure 1. Permit Location Map**

Map indication general location of Block Wolf Mining Company's Navaro Surface Mine No. 2 in McDowell County, West Virginia.



**Figure 2. Proposed Valley Fills**  
The general location of the area to be impacted by proposed mining activities of Black Wolf Mining Company in relation to the town of Gary, West Virginia



**Phase 1 Legend**

|  |                     |             |
|--|---------------------|-------------|
|  | Phase 1 Disturbance | 90.25 Acres |
|  | Phase 1 Reclamation | 16.06 Acres |
|  | Ancillary Areas     | 3.37 Acres  |

Disturbed & Unreclaimed Acres - 70.82

Percent of Permit Disturbed & Unreclaimed - 31.55%

Figure 3.1

**Black Wolf Mining Company**

Navaro Surface Mine No. 2

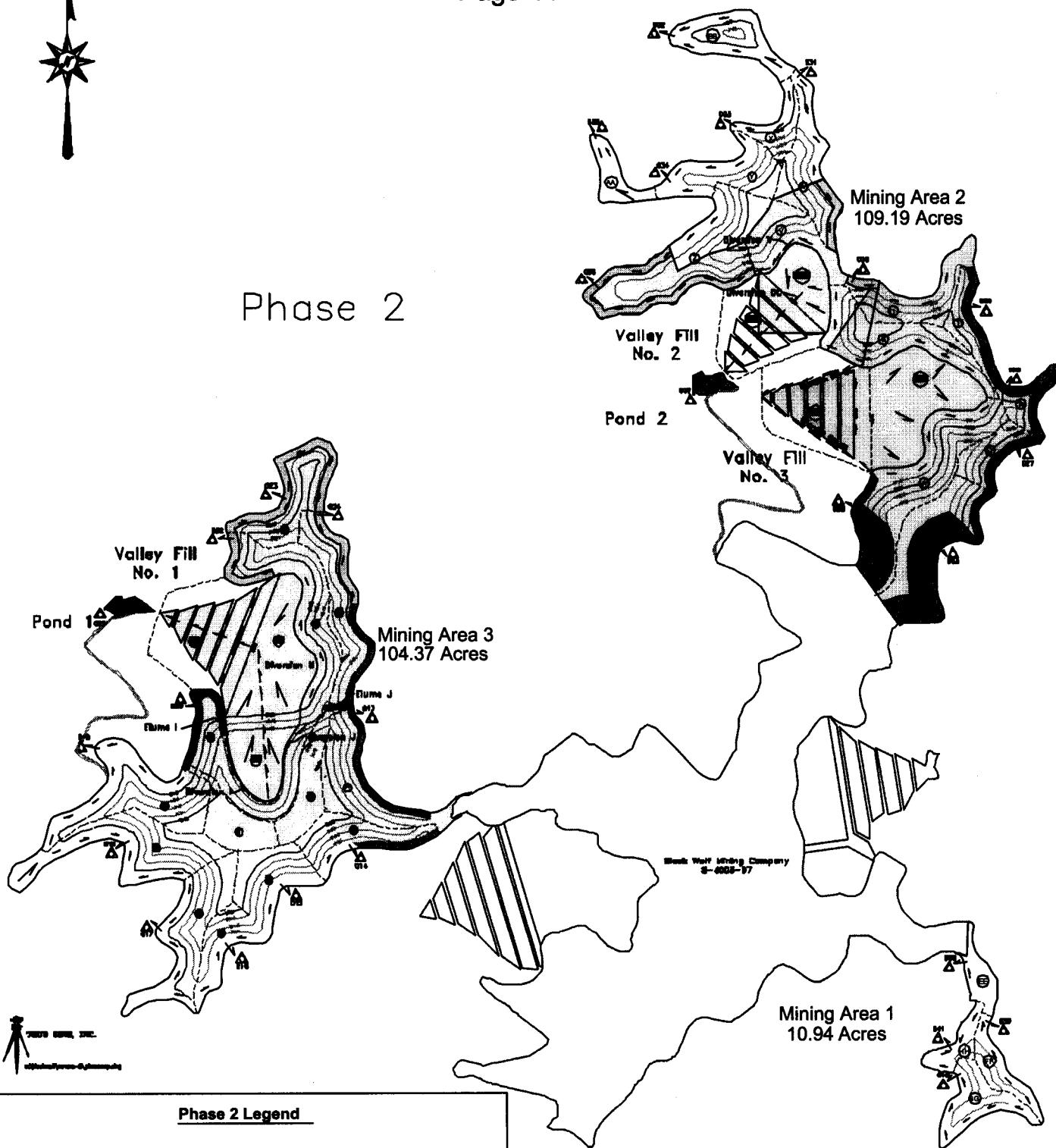
Permit S-4002-00

Mining Sequence - Phase 1





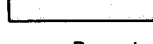
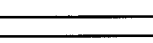
Scale 1" = 1000'

July, 2004

# Phase 2



## Phase 2 Legend

|   |                              |             |
|---|------------------------------|-------------|
|  | Previous Disturbance         | 90.25 Acres |
|  | Previous Reclamation         | 16.06 Acres |
|  | Phase 2 Disturbance          | 61.15 Acres |
|  | Phase 2 Reclamation          | 53.88 Acres |
|  | Ancillary Areas              | 3.37 Acres  |
|  | Disturbed & Unreclaimed Area | 78.09 Acres |

Percent of Permit Disturbed & Unreclaimed - 34.78%

Figure 3.2

**Black Wolf Mining Company**

Navaro Surface Mine No. 2

Permit S-4002-00

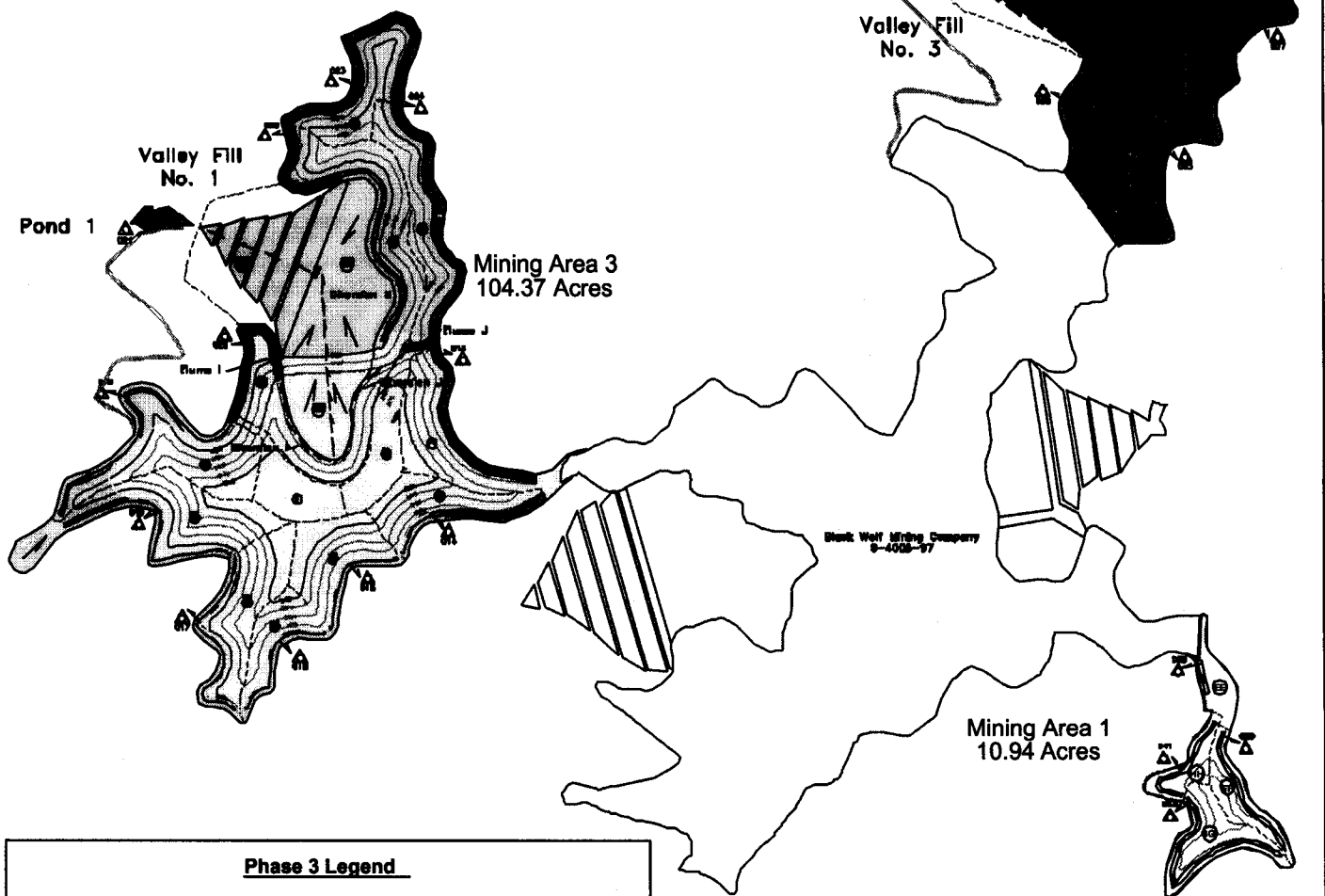
Mining Sequence - Phase 2

Scale 1" = 1000'


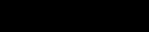




July, 2004



# Phase 3



## Phase 3 Legend

|   |                              |              |
|---|------------------------------|--------------|
|  | Previous Disturbance         | 151.40 Acres |
|  | Previous Reclamation         | 69.94 Acres  |
|  | Phase 3 Disturbance          | 62.16 Acres  |
|  | Phase 3 Reclamation          | 61.68 Acres  |
|  | Ancillary Areas              | 3.37 Acres   |
|  | Disturbed & Unreclaimed Area | 78.57 Acres  |

Percent of Permit Disturbed & Unreclaimed - 35.00%

Figure 3.3

**Black Wolf Mining Company**

Navaro Surface Mine No. 2

Permit S-4002-00

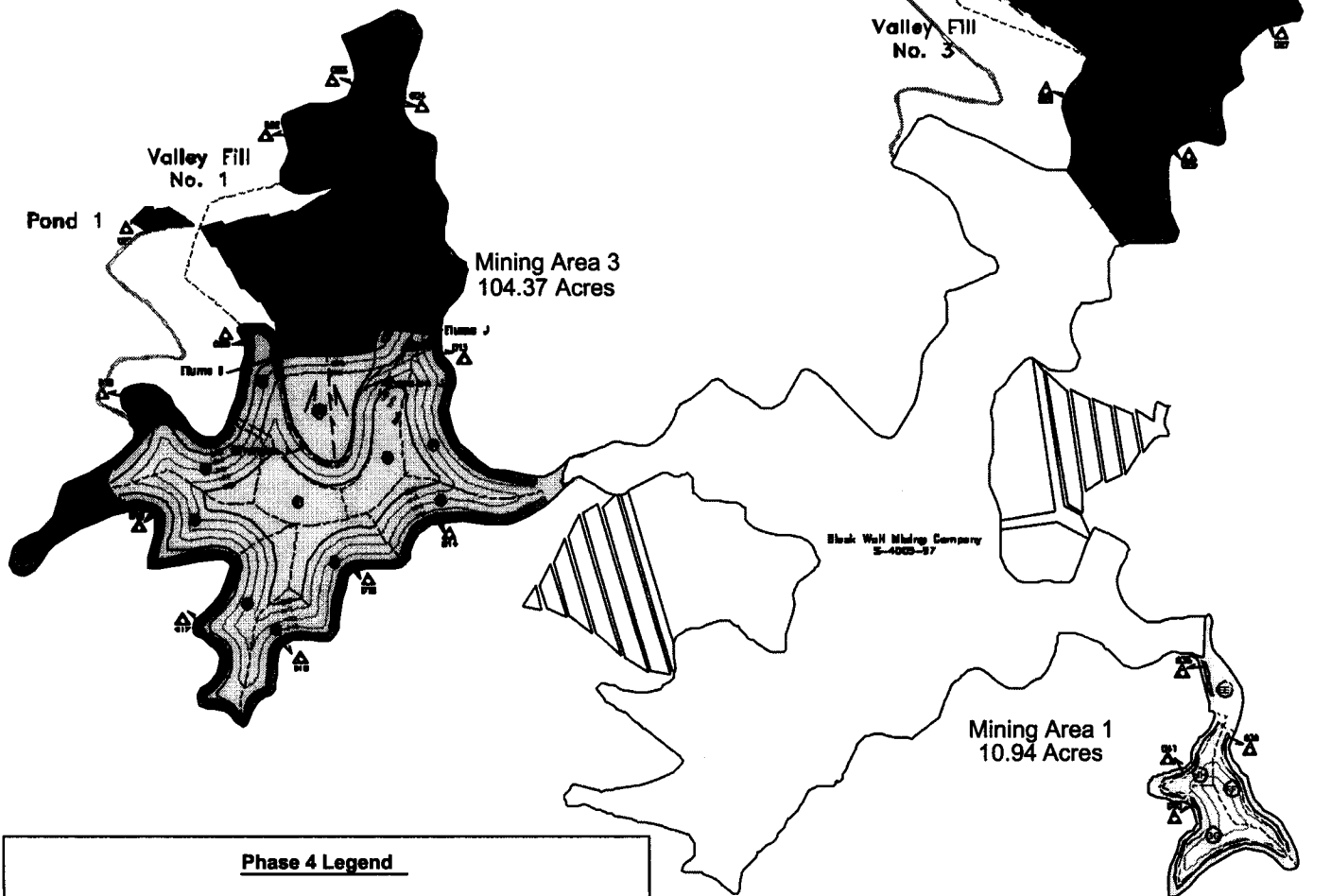
Mining Sequence - Phase 3

Scale 1" = 1000'







July, 2004



# Phase 4



## Phase 4 Legend

|   |                      |              |
|---|----------------------|--------------|
|  | Previous Disturbance | 213.56 Acres |
|  | Previous Reclamation | 131.18 Acres |
|  | Phase 4 Disturbance  | 10.94 Acres  |
|  | Phase 4 Reclamation  | 78.57 Acres  |
|  | Ancillary Areas      | 3.37 Acres   |
|  | Final Reclamation    | 10.94 Acres  |

Percent of Permit Disturbed & Unreclaimed - 4.87%

Figure 3.4

**Black Wolf Mining Company**

Navaro Surface Mine No. 2

Permit S-4002-00

Mining Sequence - Phase 4

Scale 1" = 1000'

July, 2004

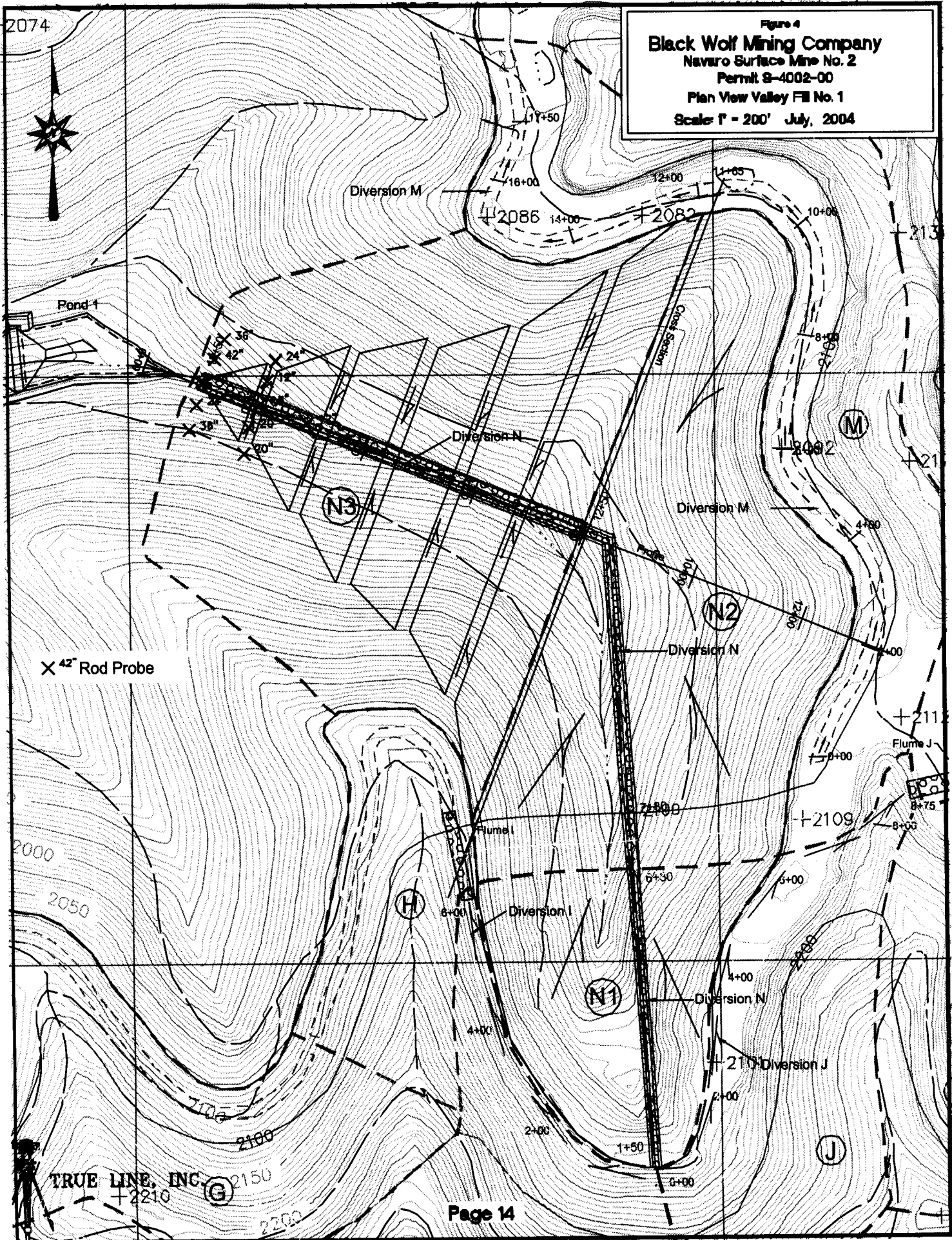


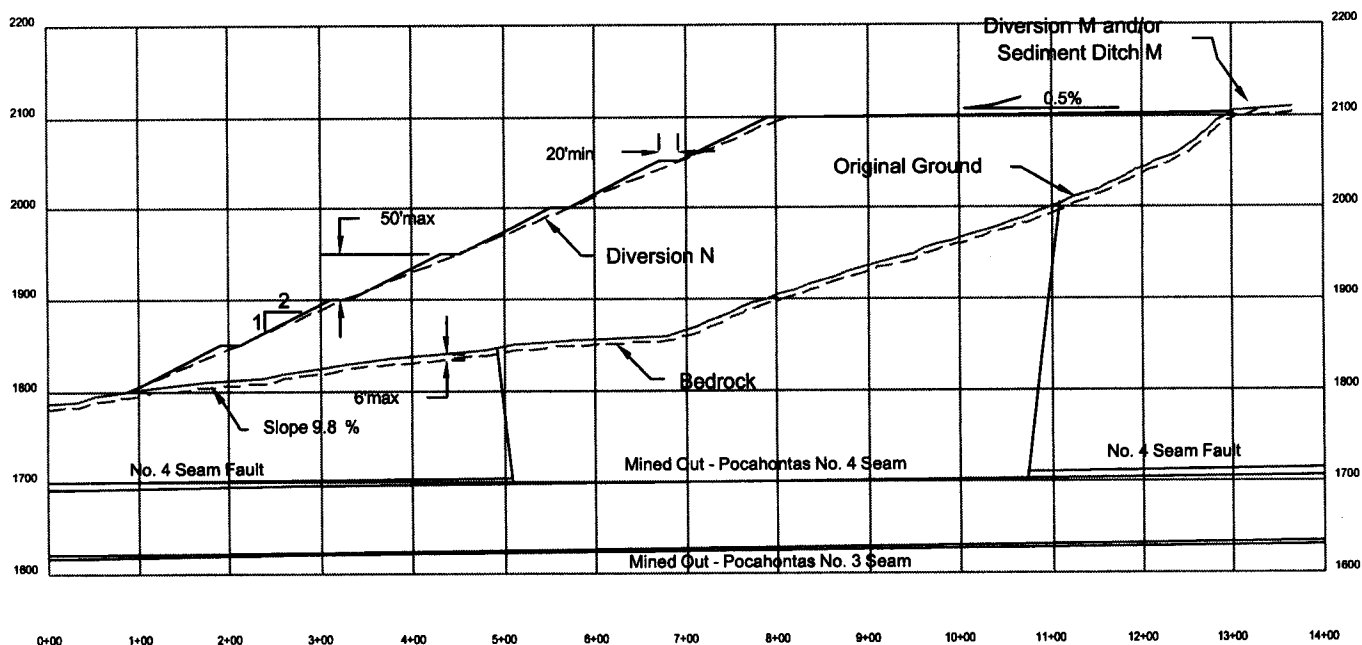


**Figure 14.** Geographic Relationship between the Proposed Impact Sites and the Proposed Mitigation Site.

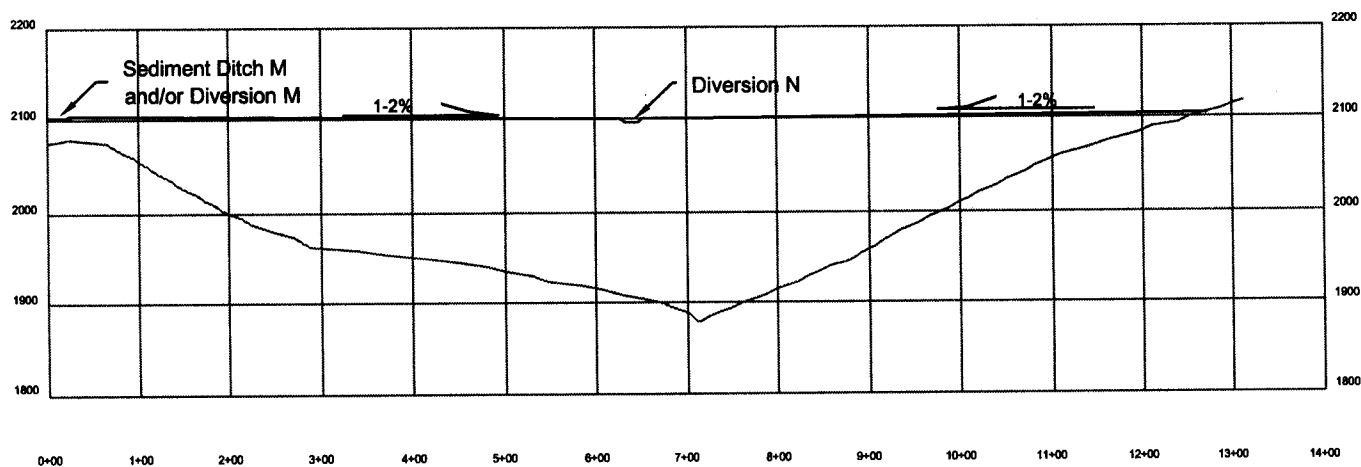
2074

Figure 4  
**Black Wolf Mining Company**  
Navaro Surface Mine No. 2  
Permit 9-4002-00  
Plan View Valley Fill No. 1  
Scale 1" = 200' July, 2004

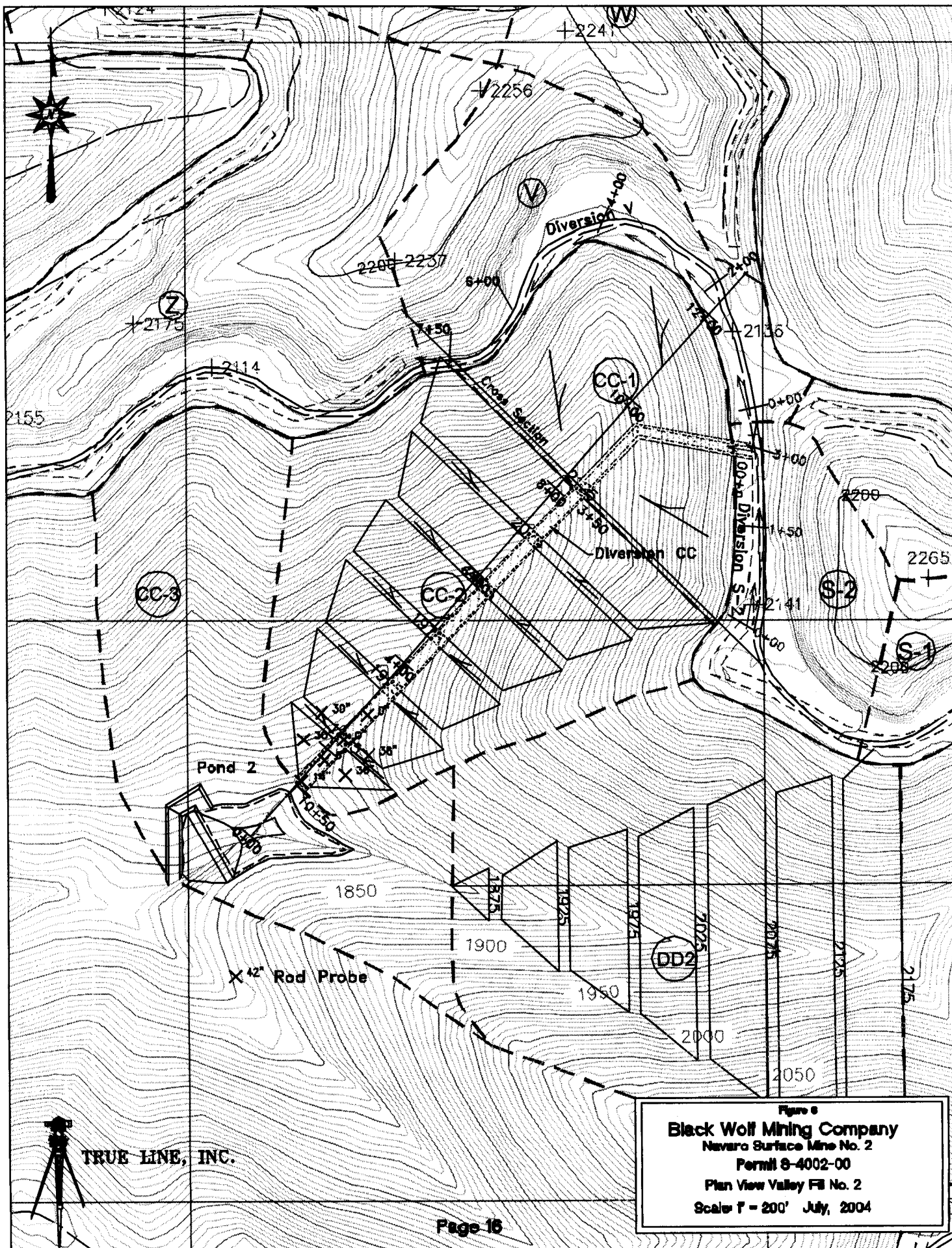




Valley Fill No. 1  
Profile  
1" = 200'



Valley Fill No. 1  
Cross Section  
1" = 200'



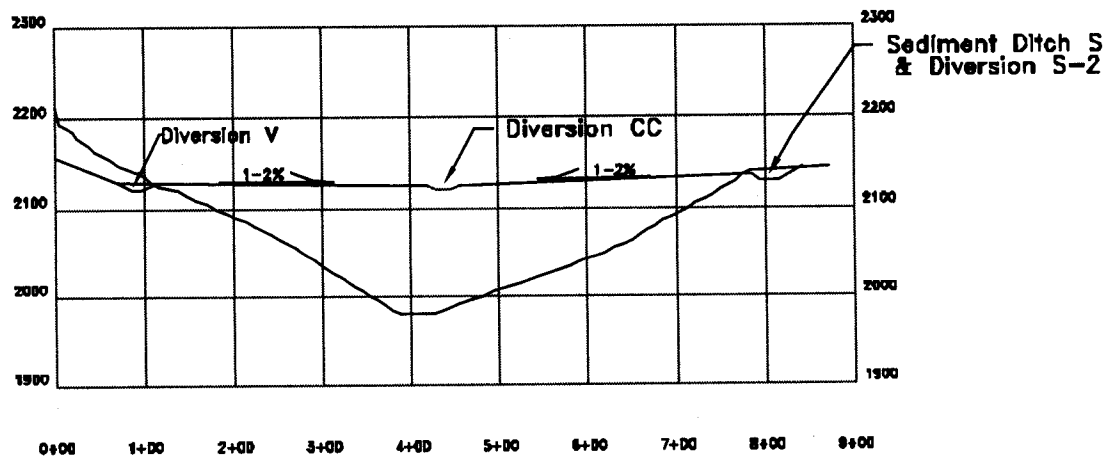
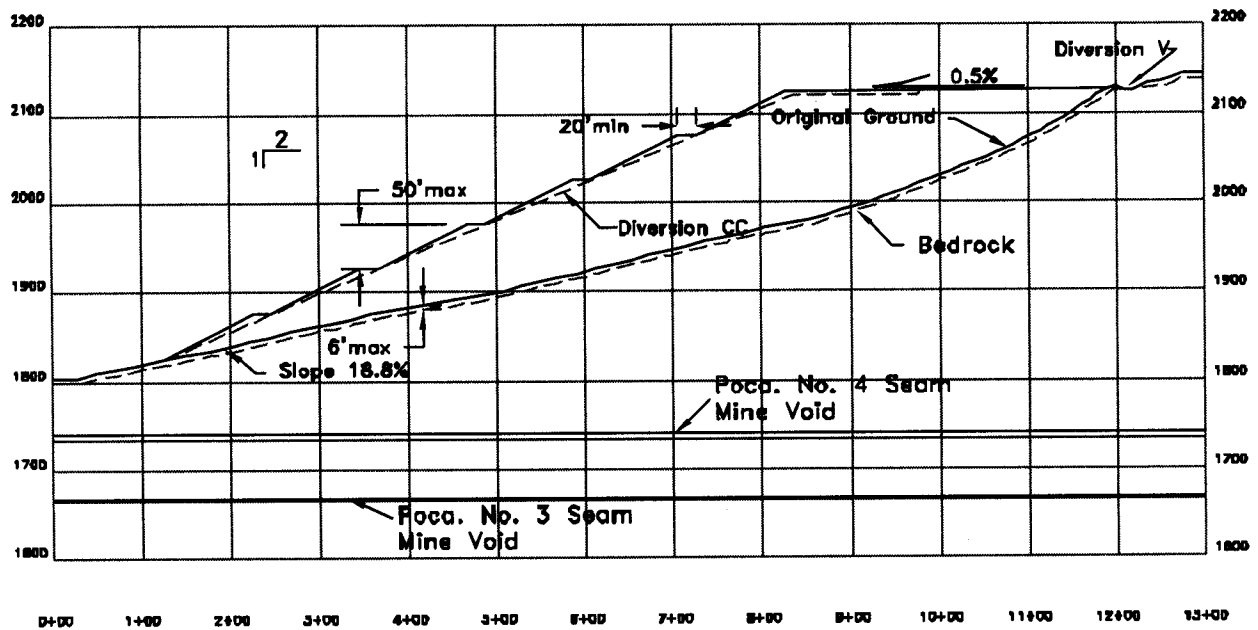


Figure 7  
**Black Wolf Mining Company**  
 Navajo Surface Mine No. 2  
 Permit S-4002-00  
 Cross Section Valley Fill No. 2  
 Scale 1" = 200' July, 2004